

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
The Development of Operational, Technical)	WT Docket No. 96-86
and Spectrum Requirements for Meeting)	FCC 05-9
Federal, State and Local Public Safety)	
Communication Requirements Through the)	
Year 2010)	

To: The Commission

REPLY COMMENTS OF THE MISSOURI STATE HIGHWAY PATROL

I Introduction

1. The Missouri State Highway Patrol hereby submits the following reply comments in response to comments filed regarding FCC 05-9, Docket 96-86 Seventh Notice of Proposed Rulemaking, released January 7, 2005, in which the Commission seeks input and comment on their tentative conclusions regarding National Coordination Committee recommendations in their Final Report to the Commission.

2. The Missouri State Highway Patrol (MSHP) is the primary statewide law enforcement agency within the State of Missouri, with responsibility covering an area of over 69,000 square miles. Consisting of 114 counties and the City of St Louis, public safety representatives in Missouri, as in many other states, regularly face challenging public safety spectrum requirements due to diverse topography and demographics. Indications are that more than 60 percent of the states population resides in just ten (10) of the state's 115 county-like entities. The introduction of new technologies to Missouri's public safety community, and, more importantly, the applications created by those technologies, is imperative in ensuring that Missouri's First Responders are able to complete the mission before them and protect Missouri's citizens.

3. Members of the Patrol's Communications Division have testified in support of public safety's positions before the United States Senate, Committee on Commerce and before the United States House of Representatives, Committee on Government Reform, addressing both interoperability and state planning public safety concerns. In addition, representatives of the Patrol have contributed greatly to issues discussed within this proceeding. As both a participant and as Chair of the Rules, Policy and Spectrum Planning Working Group within the Interoperability Subcommittee of the National Coordination Committee (NCC), MSHP personnel are aware of the issues and discussions generated throughout the NCC. In addition to its national public safety spectrum-planning commitments, the MSHP sponsors spectrum management planning within Missouri as well. The Association of Public Safety Communications Officials (APCO) Automated Frequency Coordination (AFC) Local Advisor for Missouri, who assists Missouri agencies with FCC licensing, spectrum management and frequency coordination, is sponsored and employed by the MSHP with the understanding that the majority of his workload is dedicated to public safety communications issues within Missouri. The MSHP also supports personnel dedicated to furthering regional planning resources for Region 24 (Missouri) Regional Planning Committees at both 700 and 800 MHz.

4. It is with subject matter experience, a great deal of participation in the National Coordination Committee and long-term contributions to the ongoing development of operational and technical parameters in the 700 MHz public safety bands that the Missouri State Highway Patrol submits the following comments.

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Requirement of Wideband Mobile and Portable devices be capable Of operating on all Wideband Interoperability channels using the Wideband data standard

5. To clarify our initial filing in this matter, dated May 27, 2005, the MSHP disagrees with the Commission's proposal to support the National Coordination Committee (NCC) recommendation to mandate that all wideband 700 MHz devices, with few exceptions, be required to operate on the TIA-902 wideband standard. In the pursuit of wideband data standardization and the furtherance of interoperability, the Commission indicates that paralleling the existing 700 MHz interoperability requirements for narrowband devices, which requires all devices to be capable of operating on the designated narrowband interoperability channels with the defined narrowband standard using the Project 25 Common Air Interface (CAI), is necessary and appropriate to require for wideband equipment as well. We disagree. Currently, a parallel does not exist between the standardization of narrowband 700 MHz and its benefits versus benefits garnered from the standardization of 700 MHz wideband channels, nor has the interoperability garnered from such standardization been documented. This is due to a lack of applications, identified as promoting and benefiting interoperability, using the wideband data channels. The advancement and maturity of wideband data applications has yet to be defined by public safety *in practice*, and the benefits of physical standardization for data devices and the identification of beneficial applications that would improve the interoperability quotient, is

unknown. The end users need the opportunity to have input in this process to define *their* wideband data applications and needs.

6. However, due to the Commissions assignment of eighteen (18) 50 KHz channel pairs designated for wideband data interoperability channels, the public safety community has both the opportunity and platform to develop its need for wideband subscriber-based interoperable capabilities. In time, public safety will *identify* appropriate wideband applications that will provide benefits from physical layer standardization at the subscriber level having used the identified 18 designated interoperability channels designated by the Commission. These applications will be valid as determined *by the user community* and will be identified as beneficial to data subscribers outside of their coverage areas when needed to interact with other wideband data users, contributing to interoperability in the same manner as 700 MHz narrowband standardization does. The Commission should revisit the concept of requiring the TIA-902 standard in all wideband data devices after the user community has identified beneficial wideband user applications that positively enhance physical layer interoperability. This standard, and the wideband data applications to be associated with it, is in its infancy with respect to being able to provide interoperable benefits to a user community, which has yet to define its wideband data needs. The standard will soon be available. Users wanting to heighten and define their subscriber-based interoperability will have access to the standard and be able to contribute to the maturity of the bands applications on the designated wideband data channels. Time is needed to ensure a data standard is not mandated prior to the user community's needs are defined and any requirement to carry this mode of operation in all wideband devices is premature.

7. In addition, the eighteen Commission designated wideband data channels should not be reserved solely to meet public safety physical layer standardization and subscriber based interoperability requirements alone. These designated interoperable channels, based on regional planning, State Interoperability Executive Committee (SIEC) input and in support of local and regional wideband data needs, should be permitted to operate in conjunction with wideband General Use channels to add capacity to the development of regionally defined wide area interoperable wideband data networks to meet multi-agency, regional community data needs. In other words, when agencies within a community are working together on a regional data network, they should not have to exclude the designated interoperable channels from those channels available to be used in such a network. Interoperability has always been defined at the *local level* and public safety's resources should be flexible enough to allow that definition enough flexibility to encompass all of the opportunities defined as necessary within a community.

8. Finally, public safety should not be limited in its use of wideband data at bandwidths limited to 150 KHz. Technological advances utilizing bandwidths wider than initially designated within the NCC that may promote and increase interoperability in a region should be embraced. Regional planning committees that feel data interoperability can be better met within their region with a greater number of users on fewer, larger capacity channels should be encouraged to pursue such opportunities with bandwidths exceeding 150 KHz. Regional Planning Committees should be permitted to petition the Commission to aggregate 50 KHz wideband data channels in the 700 MHz band to values greater than 150 KHz when the public safety community within a

region feels it is necessary to maximize its use of the 700 MHz wideband in that manner. An improved degree of inherent interoperability may be created whenever more subscribers operate on a single channel, compared to a lesser number of users divided amongst several channels in a community. By increasing the capacity of a channel by increasing its bandwidth, a greater number of users/agencies may be able to co-exist, allowing improve network connectivity between users and potentially a greater level of inter-agency wideband data interoperability. In some instances, a lesser number of higher capacity channels available for use in a region may lead to more multi-agency sharing and a greater degree of interoperability and improved public safety applications along with an increase in the interoperable potential of wideband data in the 700 MHz public safety band.

We thank the Commission for considering our input in this matter.

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